### Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

#### STATEMENT OF BASIS

Compressor Station No. 61
Transcontinental Gas Pipeline Corporation
Jackson, East Feliciana Parish, Louisiana
Agency Interest No.: 4211
Activity Number: PER20030001
Draft Permit 0880-00005-V1

#### I. APPLICANT:

#### Company:

Transcontinental Gas Pipeline Corporation P.O. Box 1396, Houston, TX 77251-1396

#### Facility:

Compressor Station No. 61 Hwy 68, 2 miles north of Hwy 964, Jackson, East Feliciana Parish, Louisiana Approximate UTM coordinates are 681.08 kilometers East and 3371.40 kilometers North, Zone 15

#### II. FACILITY AND CURRENT PERMIT STATUS:

Transcontinental Gas Pipeline Corporation owns and operates an existing natural gas compression facility. Compressor Station No. 61 currently operates under Permit No. 0880-00005-V1, issued July 22, 1998.

#### III. PROPOSED PERMIT / PROJECT INFORMATION:

#### **Proposed Permit**

A permit application and Emission Inventory Questionnaire (EIQ) dated December 16, 2002, and additional information dated November 2, 2004, were received requesting a Part 70 operating permit renewal.

#### **Project description**

Compressor Station No. 61 is part of Transco's interstate natural gas pipeline transmission system, which extends from the Gulf Coast to market areas in the Northeast. The facility's primary function is to compress natural gas for transmission along the main pipeline system. This is a renewal of the facility's Part 70 operating permit. PM-10 emissions were not previously speciated and are now included in the permit. The throughput of the tank has been increased from 0.140 MMgal/yr to 0.432 MMgal/yr.

Agency Interest No.: 4211 Activity Number: PER20030001 Draft Permit 0880-00005-V1

Section 6 of the Permit Application, dated December 16, 2002, lists the permitted emission rate before and after the renewal(in tons per year) for each emission point in the permit. These changes are summarized in the Permitted Air Emissions Section.

#### **Permitted Air Emissions**

Estimated changes in permitted emissions in tons per year are as follows:

Pollutant	Permitted Before	Permitted After	Permitted Change*
<u>Pollutant</u>	Before	After	Change
$PM_{10}$	-	1.35	+1.35
$SO_2$	0.08	0.08	-
$NO_X$	697.21	697.3	+0.09
СО	207.52	207.6	+0.08
VOC	33.34	33.43	+0.09

<sup>\*</sup> Changes are due to emission factor reconciliation and are not actual increases

#### Prevention of Significant Deterioration Applicability

The facility does not have an increase that would meet the definition of Major Modification; therefore, PSD does not apply.

This application was reviewed for compliance with the Louisiana Part 70 operating permit program, Louisiana Air Quality Regulations, Louisiana Comprehensive TAP Emission Control Program, New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and Prevention of Significant Deterioration (PSD) regulations.

#### **MACT** requirements

Emissions from the combustion of Group 1 virgin fossil fuels are exempt from control requirements.

#### Air Modeling Analysis

Impact on air quality from the emissions of the proposed unit will be below the National Ambient Air Quality Standards (NAAQS) and the Louisiana Ambient Air Standards (AAS) beyond industrial property.

Agency Interest No.: 4211 Activity Number: PER20030001 Draft Permit 0880-00005-V1

#### **General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

#### **Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

#### IV. REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit.

#### V. Permit Shields

A permit shield is not a component of the draft permit.

Agency Interest No.: 4211 Activity Number: PER20030001 Draft Permit 0880-00005-V1

VI. Applicability and Exemptions of Selected Subject Items				
ID No:	Requirement	Notes		
EQT 4 Cooper- Bessemer Engine	Emission Standards for Sulfur Dioxide Continuous Emissions Monitoring [LAC 33:III.1511.A] Emission Standards for Sulfur Dioxide Recordkeeping and Reporting [LAC 33:III.1513]	EXEMPT. Units emit less than 250 tons of SO <sub>2</sub> per year. Record and retain at the site for at least 2 years the data required to demonstrate compliance with or exemption from SO <sub>2</sub> standards of Chapter 15. Compliance data shall be reported annually in accordance with LAC 33:III.918.		
EQT 4 Cooper- Bessemer Engine	Control of Emissions of Nitrogen Oxides [LAC 33:III Chapter 22]  NESHAP Subpart ZZZZ- Standards for	EXEMPT. Engine run-time exemption. Engine currently removed from pipeline.  Nonresettable, elapsed run-time meter required if engine reconnected to pipeline.  DOES NOT APPLY. Existing		
	Reciprocating Internal Combustion Engines [40 CFR 63.6580]	lean-burn engine and facility minor source of HAPs.		
EQT 5 Waukesha Engine	Emission Standards for Sulfur Dioxide Continuous Emissions Monitoring [LAC 33:III.1511.A] Emission Standards for Sulfur Dioxide Recordkeeping and Reporting [LAC 33:III.1513]	EXEMPT. Units emit less than 250 tons of SO <sub>2</sub> per year. Record and retain at the site for at least 2 years the data required to demonstrate compliance with or exemption from SO <sub>2</sub> standards of Chapter 15. Compliance data shall be reported annually in accordance with LAC 33:III.918.		
	Control of Emissions of Nitrogen Oxides [LAC 33:III Chapter 22]	EXEMPT. Engine run-time exemption. Engine currently removed from pipeline. Nonresettable, elapsed run-time meter required if engine reconnected to pipeline.		
	NESHAP Subpart ZZZZ- Standards for Reciprocating Internal Combustion Engines [40 CFR 63.6580]	DOES NOT APPLY. Facility minor source of HAPs.		

Agency Interest No.: 4211 Activity Number: PER20030001 Draft Permit 0880-00005-V1

VI. Applicability and Exemptions of Selected Subject Items				
ID No:	Requirement	Notes		
EQT 6 Used Water Storage Tank	Control of Emission of Organic Compounds, Storage of Volatile Organic Compounds  [LAC 33:III.2103.A]	EXEMPT. Capacity less than 40,000 and vapor pressure <1.5 psia. Maintain records to verify exemption for at least two years.		
	NSPS Subpart K – Standards of Performance for Storage Vessels for Which Construction, Reconstruction, or Modification Commences after June 11, 1973 and Prior to May 19, 1978.	DOES NOT APPLY. Capacity <40,000 gallons.		
EQT 6 Used Water Storage Tank	[40 CFR 60.110]  NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984.  [40 CFR 60.110a]	DOES NOT APPLY. Storage tank was constructed prior to May 19, 1978.		
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.  [40 CFR 60.110b]	DOES NOT APPLY. Storage tank was constructed prior to July 23, 1984.		

# Compressor Station No. 61<sup>-</sup> Part 70 Permit Renewal Transcontinental Gas Pipeline Corporation Jackson, East Feliciana Parish, Louisiana Agency Interest No.: 4211 Activity Number: PER20030001 Draft Permit 0880-00005-V1

#### VII. Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Sulfide (H<sub>2</sub>S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III. Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO<sub>x</sub>) - Compounds whose molecules consists of nitrogen and oxygen.

Agency Interest No.: 4211 Activity Number: PER20030001 Draft Permit 0880-00005-V1

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound - Any compound of carbon and another element. Examples: Methane  $(CH_4)$ , Ethane  $(C_2H_6)$ , Carbon Disulfide  $(CS_2)$ 

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub>- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) – An oxide of sulphur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.